# State of California AIR RESOURCES BOARD

# **EXECUTIVE ORDER D-703**

Relating to Exemptions under Section 27156 of the Vehicle Code

FuelTool, LLC FuelTool

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That installation of the FuelTool device, manufactured by FuelTool, LLC of 175 Rock Road, Glen Rock, New Jersey 07452, has been found not to reduce the effectiveness of the applicable vehicle pollution control system, and therefore, the FuelTool device is exempt from the prohibitions in Section 27156 of the California Vehicle Code for installation on 2013 and older model-year gasoline vehicles certified to California Low-Emission Vehicle II ultra-low-emission vehicle (LEV II ULEV) or less stringent exhaust emission standards. This Executive Order excludes 2010 through 2013 model-year Honda Insight certified to LEV II ULEV exhaust emission standards and California zero-fuel evaporative emission standards.

This exemption excludes all vehicles certified to California zero-fuel evaporative emission standards.

This Executive Order is based on evaporative emission testing and On-Board Diagnostic II system check conducted by FuelTool, LLC with the FuelTool device.

Exemption of the FuelTool device shall not be construed as an exemption to sell, offer for sale, or advertise any components of the system as individual devices.

This Executive Order shall not apply to any device advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

This Executive Order is valid provided that installation instructions for the FuelTool device do not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

Changes made to the design or operating conditions of the FuelTool device, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the FuelTool device using an identification other than that shown in this Executive Order or for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

In addition to the foregoing, the Air Resources Board reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222 et seq.

This Executive Order does not constitute any opinion as to the effect the use of the FuelTool device may have on any warranty either expressed or implied by the vehicle manufacturer.

No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF TRANSFER FLOW, INC.'S FUELTOOL DEVICE.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order. The Executive Order may be revoked only after a ten-day written notice of intention to revoke the Executive Order, in which period the holder of the Executive Order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the Executive Order may not be revoked until a determination is made after a hearing that grounds for revocation exist.

Executed at El Monte, California, this \_\_\_\_\_ day of March 2013.

Mobile Source Operations Division

# **EVALUATION SUMMARY**

Manufacturer Name: FuelTool, LLC

Name of Device: FuelTool

# Background:

FuelTool, LLC (FuelTool) of 175 Rock Road, Glen Rock, New Jersey 07452 has requested exemption of its FuelTool device from the prohibitions in Section 27156 of the California Vehicle Code. The device is designed for 2013 and older model-year gasoline vehicles. The vehicles are certified to LEV II ultra-low-emission vehicle (LEV II ULEV) exhaust emission standards, LEV II evaporative emission standards, and On-Board Refueling Vapor Recovery (ORVR) emission standard. They are also subject to the On-Board Diagnostic II (OBD II) system requirements.

# Recommendation:

Grant exemption to FuelTool as requested and issue Executive Order D-703. The exemption applies to 2013 and older model-year gasoline vehicles certified to LEV II ULEV or less stringent exhaust emission standards. The exemption excludes 2010 through 2013 model-year Honda Insight certified to LEV II ULEV exhaust emission standards and California zero-fuel evaporative emission standards. The exemption excludes all vehicles certified to California zero-fuel evaporative (ZFE) emission standards.

## Device Description:

The FuelTool device is a fuel dispensing system that transfers fuel from the host vehicle fuel tank to another on- or off-road recipient vehicle/equipment tank. According to FuelTool, its design reduces evaporative emissions and fuel spillage from portable gas containers more commonly used to fuel such recipient vehicle/equipment. The FuelTool device is permanently mounted onto the host vehicle. It consists of a refueling nozzle, coiled refueling line, shear valve (stops fuel flow in an accident), fuel transfer line, fuel line quick connect fittings, and a housing assembly. The quick connect fittings allow installation of the fuel transfer line between the host tank and the engine. The fuel transfer line is connected to the refueling nozzle. When the host vehicle is idling, the fuel pump provides surplus supply of fuel from the tank to the refueling nozzle through the teed transfer line. Fueling is allowed via a manual regulator knob (on-off switch) in the assembly and is started with a push of a button on the nozzle. On average, fuel is transferred at a rate of two gallons per minute. The assembly is mounted in the vehicle truck bed or to the side of the vehicle. No modification to the vehicle's exhaust or evaporative emission control systems is made.

#### Discussion/Basis for the Recommendation:

This exemption is based on 3-day diurnal evaporative emission testing and OBD II system check conducted on a 2008 model-year 5.3 liter Chevrolet Silverado pick-up truck (2008 5.3 liter Sierra truck; 8GMXT05.3380/8GMXR0223840; 32,903 miles) with the FuelTool device. The test results are presented below:

	Hot Soak	3-Day Diurnal	HS + 3-D (grams/test)
Baseline	0.00	0.23	0.23
FuelTool	0.03	0.23	0.24
US EPA ADF			0.000
w/ DF			0.24
150K Standard			0.90
OEM Cert.			0.71

Test results showed that the deteriorated emissions of the modified vehicle do not exceed the applicable standard. OBD II system check during the emission test showed no diagnostic trouble codes. Based on the above, the FuelTool device is not expected to have any adverse impact on the emissions or OBD II systems of the vehicles covered under this exemption.